

1-13. (Cancelled)

14. (Currently Amended) A catalyst that has characteristics that facilitate a production of
~~for producing~~ hydrocarbon from a syngas in a slurry bed, comprising:

a catalyst support on which cobalt is loaded, wherein an alkali metal content or an alkaline-earth metal content in the catalyst support is in a range of approximately 0.01 mass% to 0.07 mass%.

15. (Currently Amended) A catalyst that has characteristics that facilitate a production of
~~for producing~~ hydrocarbon from a syngas in a slurry bed, comprising:

a catalyst support on which cobalt is loaded, wherein an alkali metal content or an alkaline-earth metal content in the catalyst support is in a range of approximately 0.01 mass% to 0.04 mass%.

16. (Previously Presented) The catalyst according to claim 15, wherein the catalyst support simultaneously satisfies a pore diameter in a range of approximately 8 nm to 50 nm, a surface area in a range from 80 m²/g to 550 m²/g and a pore volume in a range from 0.5 mL/g to 2.0 mL/g.

17. (Previously Presented) The catalyst according to claim 14, wherein the catalyst support simultaneously satisfies a pore diameter in a range of approximately 8 nm to 50 nm, a surface area in a range from 80 m²/g to 550 m²/g and a pore volume in a range from 0.5 mL/g to 2.0 mL/g.

18. (Previously Presented) The catalyst according to claim 14, wherein the catalyst support allows the catalyst to have a fractured or pulverized ratio of at most 10% when an ultrasonic wave is emitted for approximately 4 hours at a room temperature to the catalyst dispersed in water.

19. (Previously Presented) The catalyst according to claim 15, wherein the catalyst support allows the catalyst to have a fractured or pulverized ratio of at most 10% when an ultrasonic wave is emitted for approximately 4 hours at a room temperature to the catalyst dispersed in water.

20. (Previously Presented) The catalyst according to claim 16, wherein the catalyst support allows the catalyst to have a fractured or pulverized ratio of at most 10% when an ultrasonic wave is emitted for approximately 4 hours at a room temperature to the catalyst dispersed in water.

21. (Currently Amended) The catalyst according to claim 14, wherein the catalyst support is silica having a spherical shape, and has a diameter in a range of approximately 20 μ m to 250 μ m.

22. (Currently Amended) The catalyst according to claim 15, wherein the catalyst support is silica having a spherical shape, and has a diameter in a range of approximately 20 μ m to 250 μ m.

23. (Currently Amended) The catalyst according to claim 16, wherein the catalyst support is silica having a spherical shape, and has a diameter in a range of approximately 20 μ m to 250 μ m.

24. (Currently Amended) The catalyst according to claim 17, wherein the catalyst support is silica having a spherical shape, and has a diameter in a range of approximately 20 μ m to 250 μ m.

25. (Currently Amended) The catalyst according to claim 18, wherein the catalyst support is silica having a spherical shape, and has a diameter in a range of approximately 20 μ m to 250 μ m.

26. (Currently Amended) The catalyst according to claim 19, wherein the catalyst support is silica having a spherical shape, and has a diameter in a range of approximately 20 μ m to 250 μ m.

27. (Currently Amended) The catalyst according to claim 20, wherein the catalyst support is silica having a spherical shape, and has a diameter in a range of approximately 20 μ m to 250 μ m.

28-41. (Cancelled)

42. (Previously Presented) The catalyst according to claim 14, wherein the cobalt is made from a precursor of cobalt of at least one of an alkali metal or alkaline-earth metal content of at most 5 mass%.

43. (Previously Presented) The catalyst according to claim 15, wherein the cobalt is made from a precursor of cobalt of at least one of an alkali metal or alkaline-earth metal content of at most 5 mass%.

44-55. (Cancelled)

56-72. (Withdrawn)

73. (Previously Presented) The catalyst according to claim 14, wherein a CO conversion is 40% or more.

74. (Previously Presented) The catalyst according to claim 15, wherein a CO conversion is 40% or more.